## REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on May 15, 2008, and the references cited therewith.

Claims 1, 12, 23, 34, 39, and 44 are amended, and no claims are canceled or added; as a result, claims 1-49 are now pending in this application.

### *§ 102 Rejection of the Claims*

Claims 1-8, 12-14, 20-29, 32-42, 44-46, and 48-49 were rejected under 35 USC §102(e) as being anticipated by Dent, et al. (U.S. Publication No. 2003/0036359). Applicant respectfully traverses the rejection as follows.

Applicant reserves the right to swear behind the Dent § 102(e) reference at a later date. However, in an effort to further prosecution, Applicant respectfully offers the following remarks.

The Dent reference concerns mobile station loop-back signal processing for use in a voice network. More particularly, the Dent reference appears to be directed to methods and apparatus for measuring the characteristics of a portion of a network, e.g., a wireless link, in order to condition signals transmitted through that portion of the network. To this end, the Dent reference describes forming loop-back signals at mobile stations to be transmitted to the network, and for processing such loop-back signals, e.g., at a wireless communication network, to determine communication channel characteristics. The Dent reference does not appear to address a computing network device in a computing network.

By various processes, the network in the Dent reference determines communication transmit channel characteristics, which it uses to pre-compensate the signals transmitted by the network to the mobile stations. In some embodiments, the mobile stations estimate downlink channels and convey such estimates as loop-back information to the network, which uses the received estimates for transmit pre-compensation. (See Abstract and claim 1).

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The Dent reference does not appear to teach or describe the loop-back signals being network management messages, e.g., simple network management protocol (SNMP) or internet control message protocol (ICMP), nor does the Dent reference appear to teach or describe collecting response information from a network device based on the network management message and analyzing the response information including applying a Kalman filter to the collected response information.

In contrast, independent claim 1, as amended, recites program instructions provided to the memory and executable by the processor to:

> transmit a network management message, using one of simple network management protocol (SNMP) or internet control message protocol (ICMP), over a network to a network device;
> collect response information from the network device based on the network management message; and
> analyze the response information including applying a Kalman filter to the collected response information.

Applicant respectfully submits that a network management message has meaning to one skilled in the art different from that of a loop-back signal, which may be used to glean information about network signal propagation characteristics merely by observing changes to the signal as a result of its propagation through the network. Loop-back signal processing, as described in the Dent reference, may be accomplished using signals propagating in their ordinary course of being transmitted from one network location to another, e.g., by comparing a copy of the transmitted signal to the received signal. In other words, just using a signal as part of loop-back analysis processing, does not make that signal a network management message, as recited in the claims of the present disclosure.

However, in order to further prosecution, Applicant has amended independent claim 1 to further recite the network management message being transmitted using one of particular network management protocols, to more clearly define a network management message, as recited in the claims of the present

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disclosure. Support for the claim language added above appears in Applicant's specification on page 7, lines 1-14, among others.

While the Dent reference discloses that the network (within which loop-back signal processing is used to determine channel characteristics) may be interfaced to one or more external networks, e.g., a Public Switched telephone Network (PSTN) or internet, the Dent reference does not appear to determine channel characteristics of the external networks, e.g., the internet. According to Applicant's review, the Dent reference does not appear to teach or describe a loop-back signal being a message using either a simple network management protocol (SNMP) or an internet control message protocol (ICMP).

As such, Applicant respectfully submits that the Dent reference does not teach or describe each and every element and limitation of independent claim1, as amended. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection of independent claim 1, as well as those claims that depend therefrom.

With regard to independent claims 23 and 39, to the extent that the Dent reference describes a base station (BS) or mobile station receiving loop-back network information regarding a particular channel, Applicant respectfully submits that the Dent reference does not show that loop-back information including media access control (MAC) layer addressing and internet protocol flow and routing information.

In contrast, independent claim 23, as amended, recites a method that includes:

> receiving network information associated with a network device;
> analyzing the network information using a Kalman filter; and
> wherein the network information includes media access control (MAC) layer addressing and internet protocol flow and routing information.

Additionally, independent claim 39, as amended, recites a computer readable medium having instructions for causing a device to perform a method that includes:

receiving network information associated with a network device;

analyzing the network information using a Kalman filter; and

wherein the network information includes media access control (MAC) layer addressing and internet protocol flow and routing information.

Support for the claim language added to independent claims 23 and 39 above appears in Applicant's specification on page 3, lines 30-31, among others.

Therefore, Applicant respectfully submits that the Dent reference does not teach or describe each and every element and limitation of independent claims 23 and 39, as amended. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection of independent claims 23 and 39, as well as those claims that depend therefrom.

With regard to independent claims 12, 34 and 44, the Dent reference appears to be directed toward determining communication channel characteristics using loop-back analysis processing, in order to pre-condition signal transmissions to the communication channel characteristics (as previously discussed). The Dent reference does not appear to teach or describe collecting traffic flow amount information through a network device. Nor does the Dent reference appear to analyze collected (traffic flow amount) information including applying a Kalman filter to the collected (traffic flow amount) information, nor limiting the amount of traffic flow through the network device based on applying the Kalman filter.

In contrast, independent claim 12, as amended, recites a computing device including program instructions provided to the memory and executable by the processor to:

collect traffic flow amount information from a network device connected to the computing device over a network;

analyze collected information including applying a Kalman filter to the collected information; and

limit amount of traffic flow through the network device based on applying the Kalman filter to reduce degraded performance on the network.

Furthermore, independent claim 34, as amended, recites a method that includes:

collecting traffic flow amount information associated with a network device;
analyzing the collected information including applying a Kalman filter to the collected information; and
limit amount of traffic flow through the network device based on applying the Kalman filter in order to reduce network performance degradation.

In addition, independent claim 44, as amended, recites a network device including:

means for limiting amount of traffic flow through the network device based on applying a Kalman filter to information associated with the network device.

Support for the claim language added to independent claims 12, 34 and 44 above appears in Applicant's specification on page 11, lines 11-23, among other locations.

As such, Applicant respectfully submits that the Dent reference does not teach or describe each and every element and limitation of independent claims 12, 34 and 44, as amended. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection of independent claims 12, 34 and 44, as well as those claims that depend therefrom.

### §103 Rejection of the Claims

Claims 9-11, 15-19, 30-31, 43 and 47 were rejected under 35 USC § 103(a) as being unpatentable over Dent, et al.(U.S. Publication No. 2003/0036359) in view of Tzamaloukas, et al. (U.S. Publication No. 2004/0073361). Applicant respectfully traverses the rejection as follows.

With respect to dependent claims 9-11, these claims depend directly or indirectly from independent claim 1; claim 1, as amended, being in condition for allowance for the reasons set forth above with regard to the § 102(e) rejections. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. Dependent claims 9-11 include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited reference(s).

Neither the Dent reference nor the Tzamaloukas reference appears to cure the deficiency in independent claim 1 set forth above. That is, the Dent and Tzamaloukas references do not appear to describe, teach or make obvious the claim limitations missing from independent claim 1, e.g., transmitting a network management message, using one of simple network management protocol (SNMP) or internet control message protocol (ICMP), or collecting response information from the network device based on the network management message. Therefore, the Dent or Tzamaloukas references, either alone or in combination, do not appear to describe, teach or suggest each and every claimed limitation.

Accordingly, Applicant respectfully submits that the claimed invention is neither taught by, nor made obvious in view of, the combination of the Dent and Tzamaloukas references. As such, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of claims 9-11.

With respect to dependent claims 15-19, these claims depend directly or indirectly from independent claim 12; claim 12, as amended, being in condition for allowance for the reasons set forth above with regard to the § 102(e) rejections. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 12. Dependent claims 15-19 include all of the limitations of the base claim and any intervening claims, and recite

additional features which further distinguish these claims from the cited reference(s).

Neither the Dent reference nor the Tzamaloukas reference appears to cure the deficiency in independent claim 12 set forth above. That is, the Dent and Tzamaloukas references do not appear to describe, teach or make obvious the claim limitations missing from independent claim 12, e.g., program instructions provided to the memory and executable by the processor to collect traffic flow amount information from a network device connected to the computing device over a network, analyze collected information including applying a Kalman filter to the collected information, and limit amount of traffic flow through the network device. Therefore, the Dent or Tzamaloukas references, either alone or in combination, do not appear to describe, teach or suggest each and every claimed limitation.

Accordingly, Applicant respectfully submits that the claimed invention is neither taught by, nor made obvious in view of, the combination of the Dent and Tzamaloukas references. As such, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of claims 15-19.

With respect to dependent claims 30-31, these claims depend directly or indirectly from independent claim 23; claim 23, as amended, being in condition for allowance for the reasons set forth above with regard to the § 102(e) rejections. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 23. Dependent claims 30-31 include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited reference(s).

Neither the Dent reference nor the Tzamaloukas reference appears to cure the deficiency in independent claim 23 set forth above. That is, the Dent and Tzamaloukas references do not appear to describe, teach or make obvious the claim limitations missing from independent claim 23, e.g., receiving network information

associated with a network device, analyzing the network information using a Kalman filter, where the <u>network information includes media access control (MAC) layer addressing and internet protocol flow and routing information</u>. Therefore, the Dent or Tzamaloukas references, either alone or in combination, do not appear to describe, teach or suggest each and every claimed limitation.

Accordingly, Applicant respectfully submits that the claimed invention is neither taught by, nor made obvious in view of, the combination of the Dent and Tzamaloukas references. As such, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of claims 30-31.

With respect to dependent claim 43, this claim depends directly from independent claim 39; claim 39, as amended, being in condition for allowance for the reasons set forth above with regard to the § 102(e) rejections. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 39. Dependent claim 43 includes all of the limitations of the base claim, and recites additional features which further distinguish this claim from the cited reference(s).

Neither the Dent reference nor the Tzamaloukas reference appears to cure the deficiency in independent claim 39 set forth above. That is, the Dent and Tzamaloukas references do not appear to describe, teach or make obvious the claim limitations missing from independent claim 39, e.g., a computer readable medium having instructions for causing a device to perform a method including receiving network information associated with a network device, and analyzing the network information using a Kalman filter, where the <u>network information includes media access control (MAC) layer addressing and internet protocol flow and routing information</u>. Therefore, the Dent or Tzamaloukas references, either alone or in combination, do not appear to describe, teach or suggest each and every claimed limitation.

Accordingly, Applicant respectfully submits that the claimed invention is neither taught by, nor made obvious in view of, the combination of the Dent and Tzamaloukas references. As such, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of claim 43.

With respect to dependent claim 47, this claim depends directly from independent claim 44; claim 44, as amended, being in condition for allowance for the reasons set forth above with regard to the § 102(e) rejections. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 44. Dependent claim 47 includes all of the limitations of the base claim, and recites additional features which further distinguish this claim from the cited reference(s).

Neither the Dent reference nor the Tzamaloukas reference appears to cure the deficiency in independent claim 44 set forth above. That is, the Dent and Tzamaloukas references do not appear to describe, teach or make obvious the claim limitations missing from independent claim 44, e.g., means for <u>limiting amount of traffic flow through the network device</u> based on applying a Kalman filter to information associated with the network device. Therefore, the Dent or Tzamaloukas references, either alone or in combination, do not appear to describe, teach or suggest each and every claimed limitation.

Accordingly, Applicant respectfully submits that the claimed invention is neither taught by, nor made obvious in view of, the combination of the Dent and Tzamaloukas references. As such, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of claim 47.

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Reply to Office Action of May 15, 2008

## CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's below listed attorney Edward J. Brooks III at (612) 236-0120 to facilitate prosecution of this matter.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being transmitted to the United States Patent and Trademark Office facsimile number (571) 273-8300 on this ⸻ day of ⸻ July ⸻, 2008.

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